

Table 11A. Income and Cash Operating Summary; Garlic, 1998

COUNTY: Cochise FARM: SE AZ Veg 98 WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional
 CROP: Garlic ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 780.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

| Item | Unit | Quantity | Price/ Unit | Budgeted /Acre | Total /Acre | Your Farm Budget | |
|--|--------|----------|----------------|-------------------|----------------|---------------------|-------|
| INCOME | Garlic | Crtn | 780.00 | \$1.29 | \$1,006.20 | \$1,006.20 | _____ |
| CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax) | | | | | | | |
| Paid Labor (including benefits) | | | | | 65.43 | _____ | |
| Tractor/Self Propelled | | | | | 31.31 | _____ | |
| Irrigation | | | | | 27.30 | _____ | |
| Other/ Contract | | | | | 6.82 | _____ | |
| Chemicals and Custom Applications | | | | | 235.70 | _____ | |
| Fertilizer | | | | | 135.46 | _____ | |
| Herbicide | | | | | 100.24 | _____ | |
| Farm Machinery and Vehicles | | | | | 36.62 | _____ | |
| Diesel Fuel | | | | | 13.26 | _____ | |
| Repairs and Maintenance | | | | | 23.36 | _____ | |
| Irrigation (excluding labor) | | | | | 226.21 | _____ | |
| Pump Energy - Electric | | | | | 208.59 | _____ | |
| Repairs and Maintenance | | | | | 17.61 | _____ | |
| Other Purchased Inputs & Other Services and Rentals | | | | | 10.50 | _____ | |
| TOTAL CASH LAND PREPARATION AND GROWING EXPENSES | | | | | 574.46 | _____ | |
| CASH HARVEST AND POST HARVEST EXPENSES | | | | | | | |
| Paid Labor (including benefits) | | | | | 0.41 | _____ | |
| Tractor/Self Propelled | | | | | 0.41 | _____ | |
| Farm Machinery and Vehicles | | | | | 0.47 | _____ | |
| Diesel Fuel | | | | | 0.17 | _____ | |
| Repairs and Maintenance | | | | | 0.29 | _____ | |
| Custom Harvest/Post Harvest | | | | | 910.00 | _____ | |
| Other Materials | | | | | 781.75 | _____ | |
| TOTAL HARVEST AND POST HARVEST EXPENSE | | | | | 1692.63 | _____ | |
| OPERATING OVERHEAD PICKUP USE | | | | | 15.45 | _____ | |
| OPERATING INTEREST AT 10.0% | | | | | 21.49 | _____ | |
| TOTAL CASH OPERATING EXPENSES | | | | | \$2,304.04 | ===== | |
| RETURNS OVER CASH OPERATING EXPENSES | | | | | (\$1,297.84) | _____ | |

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

Table 11B. Allocations of Ownership Costs; Garlic, 1998

COUNTY: Cochise FARM: SE AZ Veg 98 WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional
 CROP: Garlic ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 780.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/27/98

| Item | -- CASH COST BASIS (\$/ACRE) -- | | -- TOTAL COST BASIS (\$/ACRE) -- | |
|--|---------------------------------|--------------|----------------------------------|--------------|
| | Income and Costs | Net Returns | Income and Costs | Net Returns |
| TOTAL INCOME at \$1.29 / Ct | \$1,006.20 | | \$1,006.20 | |
| TOTAL OPERATING EXPENSES | \$2,304.04 | | \$2,304.04 | |
| RETURN OVER CASH OPERATING EXPENSES | | (\$1,297.84) | | (\$1,297.84) |
| CASH OVERHEAD EXPENSES | | | | |
| Taxes, Housing and Insurance, Farm Machinery | 5.08 | | 5.08 | |
| Wells and Irrigation System | 9.98 | | 9.98 | |
| General and Office Overhead (5.0% of Total Operating Exp.) | 115.20 | | 115.20 | |
| General Farm Maintenance (3.0% of Total Operating Exp.) | 69.12 | | 69.12 | |
| Total Cash Overhead Expenses | 199.38 | | 199.38 | |
| Total Cash Operating and Overhead Cost | 2,503.42 | | 2,503.42 | |
| RETURNS OVER CASH OPER. AND OVER. EXPENSES | | (\$1,497.22) | | (\$1,497.22) |
| CAPITAL ALLOCATIONS (100% Equity) | | | | |
| Capital Replacement, Machinery and Vehicles | | | 27.13 | |
| Wells and Irrigation System | | | 34.45 | |
| Interest on Equity, Machinery and Vehicles | | | 13.11 | |
| Wells and Irrigation System | | | 18.95 | |
| Total Capital Allocations | | | 93.64 | |
| RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK -----> | | (\$1,497.22) | | |
| RETURNS TO LAND, MANAGEMENT AND RISK -----> | | | | (\$1,590.86) |
| Land Cost / Rent or Lease | 50.00 | | 50.00 | |
| Total Land Costs | 50.00 | | 50.00 | |
| RETURNS TO CAPITAL, MANAGEMENT AND RISK -----> | | (\$1,547.22) | | |
| RETURNS TO MANAGEMENT AND RISK -----> | | | | (\$1,640.86) |
| Management Services (8% of Total Operation Expenses) | | | 184.32 | |
| TOTAL OWNERSHIP COST | 249.38 | | 527.34 | |
| TOTAL COST | \$2,553.42 | | \$2,831.38 | |
| RETURNS TO CAPITAL, MANAGEMENT AND RISK -----> | | (\$1,547.22) | | |
| RETURNS TO RISK (PROFITS) -----> | | | | (\$1,825.18) |
| BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb) | | \$2.95 | | \$2.95 |
| BREAK-EVEN PRICE TO COVER OWNERSHIP COST | | \$0.32 | | \$0.68 |
| BREAK-EVEN PRICE TO COVER TOTAL COST | | \$3.27 | | \$3.63 |

Table 11C. Variable Operating Costs; Garlic, 1998

COUNTY: Cochise FARM: SE AZ Veg 98 WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional
 CROP: Garlic ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 780.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

| No. | First Month | Operation | ---- Hours * ---- | | ---- Operating Costs (\$/ACRE *) Per Operation ---- | | | | | Tot. Cash Expenses | Class | |
|--|-------------|----------------------------|-------------------|-------|---|-------|------------|-----------|---------|--------------------|---------|-------|
| | | | Machine | Labor | Fuel/Rps. | Labor | Cust/Serv. | Materials | Total | | | Times |
| 1 | Oct | Plow | 0.321 | 0.357 | 4.04 | 2.92 | | | 6.96 | 1.0 | 6.96 | L |
| 2 | Oct | Disk | 0.225 | 0.250 | 2.76 | 2.05 | | | 4.80 | 3.0 | 14.41 | L |
| 3 | Oct | Make Borders | 0.090 | 0.100 | 0.43 | 0.82 | | | 1.25 | 1.0 | 1.25 | G |
| 4 | Oct | Block Borders | 0.090 | 0.100 | 0.45 | 0.82 | | | 1.27 | 1.0 | 1.27 | G |
| 5 | Nov | Preirrigate | | 0.800 | 45.24 | 5.46 | | | 50.70 | 1.0 | 50.70 | G |
| 6 | Nov | Knock Borders | 0.090 | 0.100 | 0.43 | 0.82 | | | 1.25 | 1.0 | 1.25 | G |
| 7 | Nov | Soil Fertility | | | | | 3.00 | | 3.00 | 1.0 | 3.00 | G |
| 8 | Nov | Apply Fert/Ground | 0.180 | 0.200 | 0.94 | 1.64 | | 74.91 | 77.48 | 1.0 | 77.48 | G |
| 9 | Nov | List | 0.225 | 0.250 | 1.99 | 2.05 | | | 4.04 | 1.0 | 4.04 | L |
| 10 | Nov | Plant | 0.900 | 2.000 | 13.09 | 15.01 | | | 28.11 | 1.0 | 28.11 | L |
| 11 | Nov | Apply Herbicide/Ground | 0.225 | 0.250 | 1.35 | 2.05 | | 91.28 | 94.68 | 1.0 | 94.68 | G |
| 12 | Nov | Irrigate | | 0.400 | 22.62 | 2.73 | | | 25.35 | 6.0 | 152.10 | G |
| 13 | Nov | Apply Herbicide/Ground | 0.225 | 0.250 | 1.35 | 2.05 | | 8.96 | 12.36 | 1.0 | 12.36 | G |
| 14 | Dec | Cultivate | 0.225 | 0.250 | 2.41 | 2.05 | | | 4.46 | 1.0 | 4.46 | G |
| 15 | Dec | Buck Rows | 0.045 | 0.050 | 0.19 | 0.41 | | | 0.60 | 1.0 | 0.60 | G |
| 16 | Feb | Irrigate/Run Fertilizer | | 0.400 | 22.62 | 2.73 | | 30.28 | 55.63 | 2.0 | 111.26 | G |
| 17 | Apr | Prepare Ends | 0.045 | 0.050 | 0.48 | 0.41 | | | 0.89 | 1.0 | 0.89 | H |
| 18 | Dec | Deflowering | | | | | 7.50 | | 7.50 | 1.0 | 7.50 | G |
| 19 | May | Harvest 780 Ct | | | | | 780.00 | 781.75 | 1561.75 | 1.0 | 1561.75 | H |
| 20 | May | Haul, Custom 650 Ct | | | | | 130.00 | | 130.00 | 1.0 | 130.00 | H |
| 21 | Jun | Disk Residue 650 Ct | 0.150 | 0.167 | 2.41 | 1.37 | | | 3.78 | 1.0 | 3.78 | L |
| | | Pickup Use60 Mi/Acre | 2.000 | | 15.45 | | | | | | 15.45 | |
| | | Operating Interest at 10.0 | | | | | | 21.49 | | | 21.49 | |
| TOTAL CASH OPERATING EXPENSES (includes all times over): | | | | | 279.49 | 65.84 | 941.99 | 1017.46 | | | 2304.04 | T |

*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS

| | |
|------------------------|------------|
| Land Preparation (L) | 57.29 |
| Growing (G) | 517.18 |
| Harvest (H) | 1,692.63 |
| Post Harvest (P) | 0.00 |
| Marketing (M) | 0.00 |
| Operating Overhead (O) | 36.94 |
| Total (T) | \$2,304.04 |

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

| Prices | - 25% | - 10% | Budgeted | + 10% | + 25% | Break-even Price |
|------------------|---------|-----------|-----------|-----------|-----------|------------------|
| Yields | \$0.97 | \$1.16 | \$1.29 | \$1.42 | \$1.61 | |
| - 25% | 585.0 | -1,315.67 | -1,202.47 | -1,127.01 | -1,051.54 | 3.22 |
| - 10% | 702.0 | -1,456.37 | -1,320.53 | -1,229.97 | -1,139.41 | 3.04 |
| Budgeted | 780.0 | -1,550.17 | -1,399.24 | -1,298.62 | -1,198.00 | 2.95 |
| + 10% | 858.0 | -1,643.97 | -1,477.94 | -1,367.26 | -1,256.58 | 2.88 |
| Break-even Yield | -509.06 | -606.68 | -695.61 | -815.09 | -1,097.96 | |

Table 11D. Resource and Cash Flow Requirements; Garlic, 1998

COUNTY: Cochise FARM: SE AZ Veg 98 WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional
 CROP: Garlic ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 780.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

| Month * | Number Irrigations | Water Applied (inches) | Total Labor (Hrs) | Operating Costs (\$/ACRE *) | | | | | | |
|----------------------------|--------------------|------------------------|-------------------|-----------------------------|-----------------------|--------------|---------------|-----------------|---------------|----------------|
| | | | | Purchased Water | Fuel, Oil and Repairs | Labor | Chemicals | Other Purchases | Services | Total |
| AUG P | | | 0.10 | | 0.42 | 0.82 | | | | 1.24 |
| OCT P | | | 0.71 | | 7.08 | 5.79 | | | | 12.87 |
| NOV P | 2.0 | 12.0 | 4.75 | | 89.39 | 33.85 | 175.14 | | 3.00 | 301.39 |
| DEC P | 1.0 | 4.0 | 0.70 | | 28.60 | 9.95 | | | | 38.55 |
| JAN C | 1.0 | 4.0 | 0.40 | | 22.62 | 2.73 | | | | 25.35 |
| FEB C | 1.0 | 4.0 | 0.40 | | 22.62 | 2.73 | 30.28 | | | 55.63 |
| MAR C | 2.0 | 8.0 | 0.80 | | 45.24 | 5.46 | 30.28 | | | 80.98 |
| APR C | 2.0 | 8.0 | 0.85 | | 45.71 | 3.14 | | | 7.50 | 56.35 |
| MAY C | | | | | | | | 781.75 | 910.00 | 1691.75 |
| JUN C | | | 0.17 | | 2.36 | 1.37 | | | | 3.73 |
| Pickup Use60 Mi/Acre | | | | | 15.45 | | | | | 15.45 |
| Operating Interest at 10.0 | | | | | | | | | 21.49 | 21.49 |
| Total | 9.0 | 40.0 | 8.87 | | 279.49 | 65.84 | 235.71 | 781.75 | 941.99 | 2304.78 |
| % | | | | | 12.13 | 2.86 | 10.23 | 33.92 | 40.87 | 100.00 |

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 256.4
 Total P 212.0
 Total K 0.0
 Total Labor 8.9
 Total Water 40.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 17.2 Gal
 Unleaded Gas 6.0 Gal
 Electric / Pumping 2781.2 KWH
 All Direct Energy 12.6 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

| | | |
|---------------------------------|-----------------------------------|--------------------------------|
| Bed Shaper, 4 Rw 0.90 Hr | Blade Shaper, 10' 0.09 Hr | Border Disk, 6' Disk 0.18 Hr |
| Cultivator, Sweep, 4 Rw 0.22 Hr | Fertilizer Broadcaster, 0.18 Hr | Lister, 5 Bottom 0.22 Hr |
| Moldboard Plow, 4-16 2 0.32 Hr | Offset Disk, 12' 0.67 Hr | Offset Disk, 13.5' 0.05 Hr |
| Offset Disk, 18' 0.15 Hr | Pickup Truck, 1/2 Ton 2.00 Hr | Planter/Gramor, 4 Bd,8 0.90 Hr |
| Rowbuck, 10' 0.05 Hr | Saddle Tk Sprayer, 2 Tk 8 0.45 Hr | Tractor, 50 PTO HP, 0.05 Hr |
| Tractor, 60 PTO HP, 0.90 Hr | Tractor, 100 PTO HP, 1.17 Hr | Tractor, 125 PTO HP, 1.22 Hr |
| Tractor, 150 PTO HP, 0.15 Hr | | |

MATERIALS REQUIREMENT (per Acre)

| | | |
|-------------------------|---------------------------------|----------------------------|
| 11-53-00, Dry 400.00 Lb | 32-00-00, URAN 32, Lqd 60.00 Ga | Boxes & Supplies 780.00 Ct |
| Bromoxynil 1.00 Pt | DCPA 14.00 Lb | Garlic Cloves 10.00 C |
| Water, Pump 40.00 AI | | |

LABOR REQUIREMENT (per Acre)

| | | |
|--------------------|---------------|-----------------|
| Irrigators 4.00 Hr | Other 1.00 Hr | Tractor 3.87 Hr |
|--------------------|---------------|-----------------|

*NOTE: P = Previous Year C = Current Year N = Next Year

Table 11E. Schedule of Operations; Garlic, 1998

COUNTY: Cochise FARM: SE AZ Veg 98 WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional
 CROP: Garlic ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 780.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 11/11/98

| First No. | Month | Times | Operation | Equipment/ Custom Oper | | Job Rate Acres/Hr | Material Use and Cost | | | | Service Cost \$ / Unit | Labor Type | |
|-----------|-------|-------|-------------------------|------------------------|---|-------------------|-----------------------|------------|-----------|--------|------------------------|------------|----|
| | | | | HP | Self-Prop./ Implement | | Name | Appl. Rate | \$ / Unit | | | | |
| 1 | Oct | 1.0 | Plow | 125 | Moldboard Plow, 4-16 2 | 2.80 | | | | | | Tractor | |
| 2 | Oct | 3.0 | Disk | 125 | Offset Disk, 12' | 4.00 | | | | | | Tractor | |
| 3 | Oct | 1.0 | Make Borders | 60 | Border Disk, 6' Disk | 10.00 | | | | | | Tractor | |
| 4 | Oct | 1.0 | Block Borders | 60 | Blade Scraper, 10' | 10.00 | | | | | | Tractor | |
| 5 | Nov | 1.0 | Preirrigate | 1.25 | Water, Pump | 10.00 | 8.00 | AI | 67.86 | AF | | Irrigators | |
| 6 | Nov | 1.0 | Knock Borders | 60 | Border Disk, 6' Disk | 10.00 | | | | | | Tractor | |
| 7 | Nov | 1.0 | Soil Fertility | | CST Soil Analysis (Surface) | | | | | | 3.00 | Ac | |
| 8 | Nov | 1.0 | Apply Fert/Ground | 60 | Fertilizer Broadcaster, | 5.00 | 11-53-00, Dry | 400.00 | Lb | 355.00 | Tn | Tractor | |
| 9 | Nov | 1.0 | List | 100 | Lister, 5 Bottom | 4.00 | | | | | | Tractor | |
| 10 | Nov | 1.0 | Plant | 100 | Planter/Gramor, 4 Bd,8 Bed Shaper, 4 Rw | 1.00 | Garlic Cloves | 10.00 | C | 0.00 | CW | Tractor | |
| 11 | Nov | 1.0 | Apply Herbicide/Ground | 60 | Saddle Tk Sprayer, 2 Tk 8 | 4.00 | DCPA | 14.00 | Lb | 6.18 | Lb | Tractor | |
| 12 | Nov | 6.0 | Irrigate | 2.50 | Water, Pump | 4.00 | | 4.00 | AI | 67.86 | AF | Irrigators | |
| 13 | Nov | 1.0 | Apply Herbicide/Ground | 60 | Saddle Tk Sprayer, 2 Tk 8 | 4.00 | Bromoxynil | 1.00 | Pt | 67.93 | Ga | Tractor | |
| 14 | Dec | 1.0 | Cultivate | 125 | Cultivator, Sweep, 4 Rw | 4.00 | | | | | | Tractor | |
| 15 | Dec | 1.0 | Buck Rows | 50 | Rowbuck, 10' | 20.00 | | | | | | Tractor | |
| 16 | Feb | 2.0 | Irrigate/Run Fertilizer | 2.50 | Water, Pump | 4.00 | | 4.00 | AI | 67.86 | AF | Irrigators | |
| | | | | | 32-00-00, URAN 32, | | | 30.00 | Ga | 173.00 | Tn | | |
| 17 | Apr | 1.0 | Prepare Ends | 100 | Offset Disk, 13.5' | 20.00 | | | | | | Tractor | |
| 18 | Dec | 1.0 | Deflowering | | CST Deflowering | | | | | | 7.50 | Ac | |
| 19 | May | 1.0 | Harvest | | CST Harvest Garlic | | Boxes & Supplies | 780.00 | Ct | 0.95 | Ct | 1.00 | Ct |
| 20 | May | 1.0 | Haul, Custom | | CST Haul Garlic | | | | | | | 0.20 | Ct |
| 21 | Jun | 1.0 | Disk Residue | 150 | Offset Disk, 18' | 6.00 | | | | | | Tractor | |
| | | | Pickup use 60 Mi/Ac | | Pickup Truck, 1/2 Ton | 0.50 | | | | | | | |

*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.